

CLAIMS

1. A data processing system comprising an object server to provide access to a remote object, a first object registry for publishing first access data for locating and
5 accessing the remote object via the server, a second object registry for publishing second access data for locating and accessing the remote object via the server; and a client hosting a client application requiring access to the remote object; the client application being arranged to issue a request to receive access data for locating and
10 accessing the remote object; the access data being supplied by at least one of the first and second object registries in the form of at least one of the first or second access data; the object server being arranged to supply the access data to the first and second object registries.
2. A data processing system as claimed in claim 1, further comprising an intermediate
15 registry, hosted by an intermediate registry server, for servicing at least one of the request for access data and an access data publication request comprising the access data for locating and providing access to the remote object.
3. A data processing system as claimed in claim 2, in which the intermediate registry
20 maps the request for access data to two access requests; the two access requests being directed to respective ones of the first and second registries and being in respect of the first and second access data respectively.
4. A data processing system as claimed in either of claims 2 and 3, in which the
25 intermediate registry maps the access data publication request to two access data publication requests; each of the two object access data publication requests being directed to respective ones of the first and second registries and both containing the access data for locating and providing access to the remote object.
- 30 5. A data processing system as claimed in claim 4, in which the first and second access data are derived from the access data for locating and providing access to the remote object.
- 35 6. A data processing system as claimed in any preceding claim, in which the request to receive access data comprises means to invoke a first predetermined instruction arranged to support access to at least one of the first and second object registries and

to request at least one of the first and second access data respectively.

- 5 7. A data processing system as claimed in claim 6, in which the first predetermined instruction is arranged to support access to both the first and second object registries and to request both the first and second access data substantially simultaneously.
- 10 8. A data processing system as claimed in claim 7, in which the predetermined instruction is a Java bind instruction modified to provide access to the first and second object registries and to request the first and second access data.
- 15 9. A data processing system as claimed in any preceding claim, in which the first and second access data are supplied to the first and second registries using a second predetermined instruction.
- 20 10. A data processing system as claimed in claim 9, in which the second predetermined instruction is arranged to supply the first and second access data to the first and second object registries substantially simultaneously.
- 25 11. A data processing system as claimed in claim 10, in which the second predetermined instruction is a Java lookup instruction modified to provide the first and second access data to the first and second object registries substantially simultaneously.
- 30 12. A data processing system as claimed in any preceding claim, in which the first and second object registries are hosted by first and second servers respectively that are operated in active and stand-by modes so that the request for access data is processed by the first server; the first and second servers comprising means to migrate a communication channel for carrying the request from the first server to the second server in the event of a fault associated with the first server such that the second server services subsequent requests for access data.
- 35 13. A data processing system as claimed in claim 12, in which the published access data is supplied to the first server and mirrored to the second server.
14. A client for a system as claimed in any preceding claim.
15. An object server for a system as claimed in any preceding claim.

16. An intermediate registry server for a system as claimed in any preceding claim.
- 5 17. A remote object registry system comprising an object server to provide access to an object that can be invoked remotely; at least first and second object registries for publishing access data associated with the object to support remote invocation of that object; and at least one intermediate registry server for responding to requests for the access data associated with the remote object by retrieving that access data from at least one of the first and second object registries.
- 10 18. An intermediate registry server comprising means to receive a request for access data associated with an object accessible via an object server, and, in response to the request, means to request the access data from first and second object registries storing the access data; and means to respond to the request by forwarding the access data returned from at least one of the first and second object registries.
- 15 19. An intermediate registry server comprising means to receive a command to post, to at least first and second object registries, access data associated with a remotely accessible object that can be invoked via an object server, and means to instruct both the first and second object registries to store the access data.
- 20 20. A method for remote object invocation comprising the steps of issuing at least a first request for access data for a remote object to first and second remote object registries hosted by first and second servers; the access data being such as to support invocation, within a first environment, of at least a method of the remote object hosted by or accessible by a second environment; receiving the access data from at least one of the first and second remote object registries; and invoking the method of the remote object via the second environment.
- 25 21. A method as claimed in claim 20, in which the step of issuing at least the first request comprises the steps of issuing a prior request for access data to an intermediate server that translates the forwards the prior request to first and second requests for that data to the first and second remote object registries respectively.
- 30 22. A method as claimed in either of claims 20 and 21 further comprising the step of providing a first programming language instruction implementing a post of access
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data; the instruction comprising first and second parameters representing references to first and second access data accessible via the first and second remote object references respectively.

- 5 23. A method as claimed in claim 22 in which the step of providing a first programming language instruction comprises the step of modifying an existing programming language instruction implement the request for access data.
- 10 24. A method as claimed in claim 23 in which the step of modifying an existing programming language instruction comprises the step of modifying a Java bind or rebind instruction to utilise the first and second parameters.
- 15 25. A method as claimed in any of claims 20 to 24, further comprising the step of providing a second programming language instruction implementing a request for the access data; the instruction comprising first and second parameters representing references to first and second access data accessible via the first and second remote object references respectively.
- 20 26. A method as claimed in claim 25 in which the step of providing a second programming language instruction comprises the step of modifying an existing programming language instruction implement the request for access data.
- 25 27. A method as claimed in claim 26 in which the step of modifying an existing programming language instruction comprises the step of modifying a Java lookup instruction to utilise the first and second parameters.
- 30 28. A method as claimed in any of claims 20 to 27, further comprising the steps of reflecting data associated with the first remote object server to the second remote object server; migrating address data associated with the first remote object server to the second remote object server; and directing the access request, originally intended for the first remote object server, to the second remote object server.
- 35 29. A computer program element comprising computer program code means for implementing a system or method as claimed in any preceding claim.

30. A computer program product comprising a computer readable storage medium storing a computer program element as claimed in claim 29.